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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,369	12/29/2000	Patrick Doyle	042390.P9017	2184

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EXAMINER	
CHANKONG, DOHM	
ART UNIT	**PAPER NUMBER**
2154	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/752,369	DOYLE ET AL.	
	Examiner	Art Unit	
	Dohm Chankong	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 September 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-26 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-26 are rejected under 35 U.S.C 102(e) as being anticipated by Osten et al (hereinafter Osten), U.S Patent No. 6,735,660.

4. As to claim 1, Osten teaches a method comprising:

requesting an Infiniband connectivity configuration (claim 8);

receiving a response regarding whether the requested configuration can be provided

(column 8, lines 41-46);

attempting to establish the requested connectivity configuration if the response to the request is affirmative (column 8, line 59 to column 9, line 8).

5. As to claim 2, Osten teaches a method wherein the requested connectivity configuration is not contained in the specification established for the InfiniBand architecture (column 2, lines 53-65 and column 5, line 57 to column 6, line 11 – since the concept of sideband communications was not in the 'standards' for InfiniBand, Osten's conceptualization of sideband communications in the InfiniBand architecture was not in the original spec).

6. As to claim 3, Osten teaches a method wherein the requested connectivity configuration is comprised of a plurality of links (column 2, line 59 and column 5, line 66 to column 6, line 11 where the signal positions are equivalent to the links) .

7. As to claim 4, Osten teaches a method wherein the requested connectivity configuration is provided using a standard InfiniBand backplane connector (column 5, line 57 to column 6, line 3).

8. As to claim 5, Osten teaches a method wherein said request for a connectivity configuration is made by an Infiniband module to an Infiniband chassis management entity

(column 7, lines 9-15 and line 58 to column 8, line 14 where the IOA is the module and the chassis management entity is the system management controller).

9. As to claim 6, Osten teaches a method wherein said request for a connectivity configuration is made through an InfiniBand management link (column 8, lines 8-34).

10. As to claim 7, Osten teaches a method wherein said request for a connectivity configuration is written to a first management link configuration register and said response to said request is written to a second management link configuration register (column 7, lines 16-34 and lines 43-53 – where the VPD block on the IOA is equivalent to the first management link configuration register and the tri-state logic block is the second management link configuration register).

11. As to claim 8, Osten teaches a method comprising:

receiving a connectivity configuration request associated with an InfiniBand connector, the configuration request representing an expanded InfiniBand connector configuration including information indicative of one or more desire links to be established through the InfiniBand connector and assigning one or more physical lanes of the InfiniBand connector to each of the one or more desired links (claims 8, 9, 14 and 15); and

configuring the InfiniBand connector in accordance with said connectivity configuration request (claim 13).

12. As to claim 9, Osten teaches a method wherein said connectivity configuration is made by an Infiniband module to an Infiniband chassis management entity (column 7, lines 9-15 and line 58 to column 8, line 14 where the IOA is the module and the chassis management entity is the system management controller).

13. As to claim 10, Osten teaches a method wherein said expanded InfiniBand connector configuration is not contained in the specification established for the InfiniBand architecture (column 2, lines 53-65 and column 5, line 57 to column 6, line 11).

14. As to claim 11, Osten teaches a method wherein said expanded InfiniBand connector configuration is comprised of a plurality of links (column 2, line 59 and column 5, line 66 to column 6, line 11 where the signal positions are equivalent to the links).

15. As to claim 12, Osten teaches a method comprising:

an InfiniBand management link operating to enable the establishment of an InfiniBand connectivity configuration (column 7, lines 43-49 and claim 14), wherein said management link:

records a request for a connectivity configuration made by an InfiniBand module (claim 8);

allows an InfiniBand chassis to obtain said request for a connectivity configuration (column 8, lines 22-31);

records a response from said InfiniBand chassis to said request for a

connectivity configuration (column 8, lines 22-31 and claim 8);

allows said InfiniBand module to obtain said response to said request for a connectivity configuration (claim 27).

16. As to claim 13, Osten teaches a method wherein the requested connectivity configuration is not contained in the specification established for the InfiniBand architecture (column 2, lines 53-65 and column 5, line 57 to column 6, line 11).

17. As to claim 14, Osten teaches a method wherein said request for a connectivity configuration is written to a first management link configuration register and said response to said request is written to a second management link configuration register (column 7, lines 16-34 and lines 43-53 and claim 27).

18. As to claim 15, Osten teaches a method wherein the requested connectivity configuration is comprised of a plurality of links (column 2, line 59 and column 5, line 66 to column 6, line 11).

19. As to claim 16, Osten teaches a network apparatus comprising:

an InfiniBand connector (column 6, lines 3-11);

an InfiniBand module that is operable to make a request for an expanded connectivity configuration for the InfiniBand connector (column 7, lines 43-53);

a chassis management entity coupled to said InfiniBand module that receives the request for an expanded connectivity configuration for the InfiniBand connector and that provides a response regarding whether the requested configuration can be provided (column 7, line 58 to column 8, line 21).

20. As to claim 17, Osten teaches the network apparatus wherein the requested connectivity configuration is not contained in the specification established for the InfiniBand architecture (column 2, lines 53-65 and column 5, line 57 to column 6, line 11).

21. As to claim 18, Osten teaches the network apparatus wherein the requested connectivity configuration is other than:

a single link comprised of a connection to the first pin of a plurality of pins on the InfiniBand connector;

a single link comprised of a connection to the first four pins of the plurality of pins on the InfiniBand connector; or

a single link comprised of a connection to the first twelve pins of the plurality of pins on the InfiniBand connector (column 6, lines 3-11 and claims 8 and 9).

22. As to claim 19, Osten teaches the network apparatus wherein said InfiniBand module is operable to establish the requested connectivity configuration if the response to the request is affirmative (column 8, line 59 to column 9, line 8).

23. As to claim 20, Osten teaches the network apparatus wherein said requested connectivity configuration is comprised of a plurality of links that are provided simultaneously through said InfiniBand connector (column 5, line 57 to column 6, line 11 and claim 8).

24. As to claim 21, Osten teaches a network apparatus wherein the InfiniBand connector is a standard InfiniBand backplane connector (column 5, line 57 to column 6, line 3).

25. As to claim 22, Osten teaches a network apparatus wherein said request for a connectivity configuration is made through an InfiniBand management link (column 8, lines 8-34).

26. As to claim 23, Osten teaches a network apparatus wherein said request for a connectivity configuration is written to a first management link configuration register and said response to said request is written to a second management link configuration register (column 7, lines 16-34 and lines 43-53 and claim 27).

27. Claim 24 is a machine readable medium with stored sequences of instructions that performs the steps of the method of claim 1. Therefore, claim 24 is rejected for the same reasons as set forth in above paragraph 4 for claim 1.

28. Claim 25 is a machine readable medium that performs the step of the method of claim 2. Therefore, claim 25 is rejected for the same reasons as set forth in above paragraph 5 for claim 2.

29. Claim 26 is a machine readable medium that performs the step of the method of claim 3. Therefore, claim 26 is rejected for the same reasons as set forth in above paragraph 6 for claim 3.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are further cited to further show the state of the art in regards to Infiniband and connectivity configurations:

U.S Patent No. 6,237,048 to Allen et al;

U.S Patent No. 6,400,730 to Latif et al;

U.S Patent No. 6,594,712 to Pettey et al;

U.S Patent No. 6,693,901 to Byers et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is (703)305-8864. The examiner can normally be reached on 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703)305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DC

ZARNI MAUNG
PRIMARY EXAMINER